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Sympodioplanus goaensis sp. nov. from Goa, India

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Abstract — A new species, *Sympodioplanus goaensis*, occurring on decaying unidentified twigs collected from Goa, India, is described and illustrated. The fungus is characterized by numerous conidiogenous cells that are polyblastic, sympodial, integrated, and terminal as well as intercalary and by naviculiform 1–2-septate conidia

Key words — taxonomy, litter fungi

Introduction

During a biodiversity survey of litter-degrading microfungi from forests of Western Ghats in Goa, an undescribed anamorphic fungus with morphological characteristics of *Sympodioplanus* R.C. Sinclair & Boshoff was found on fallen decomposing twigs of an unidentified plant. The fungus is described, illustrated, and compared with other *Sympodioplanus* spp.

Materials & methods

Freshly gathered litter samples from Sonal forests of Goa were taken to the laboratory in polythene bags, incubated for 2–3 days, and examined under a stereomicroscope. Fungal fruiting bodies were carefully picked up with a sterile needle, mounted in lactophenol, and observed under a light microscope. Several fungi were observed, one of them an undescribed species of *Sympodioplanus*, which is described here. The holotype is conserved in the herbarium of the Indian Agricultural Research Institute, New Delhi, India (HCIO).

Taxonomy

Sympodioplanus goaensis Pratibha, **sp. nov.** (Figs 1, 2)

MycoBank MB804078

Differs from *Sympodioplanus capensis* by its larger conidia with fewer septa and from *S. yunnanensis* by its smaller conidia with fewer septa.

Type: India, Goa, Sattari, Sonal, tropical forests of Western Ghats, on decomposing litter of unidentified tree, 26 January 2013, coll. J. Pratibha (**Holotype** HCIO 51503).

Etymology: In reference to the biodiversity rich Goa State.

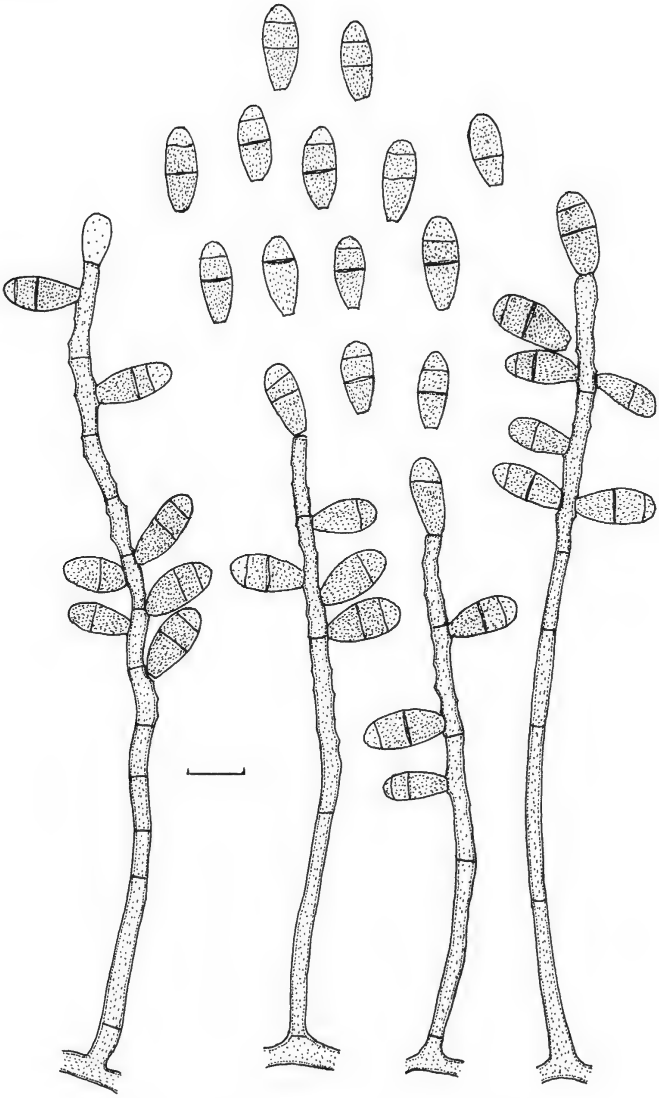

Fig. 1. *Sympodioplanus goaensis* (holotype HCIO 51503): Conidiophores, conidiogenous cells, and conidia. Scale bar = 20 µm.

Colonies on natural substrate effuse, hairy, dark brown. Mycelium partly superficial, partly immersed in the host tissue, composed of light brown, smooth, branched, thin-walled, 1.5–3 µm wide hyphae. Conidiophores macronematous, mononematous, erect, straight to flexuous, smooth, thick-

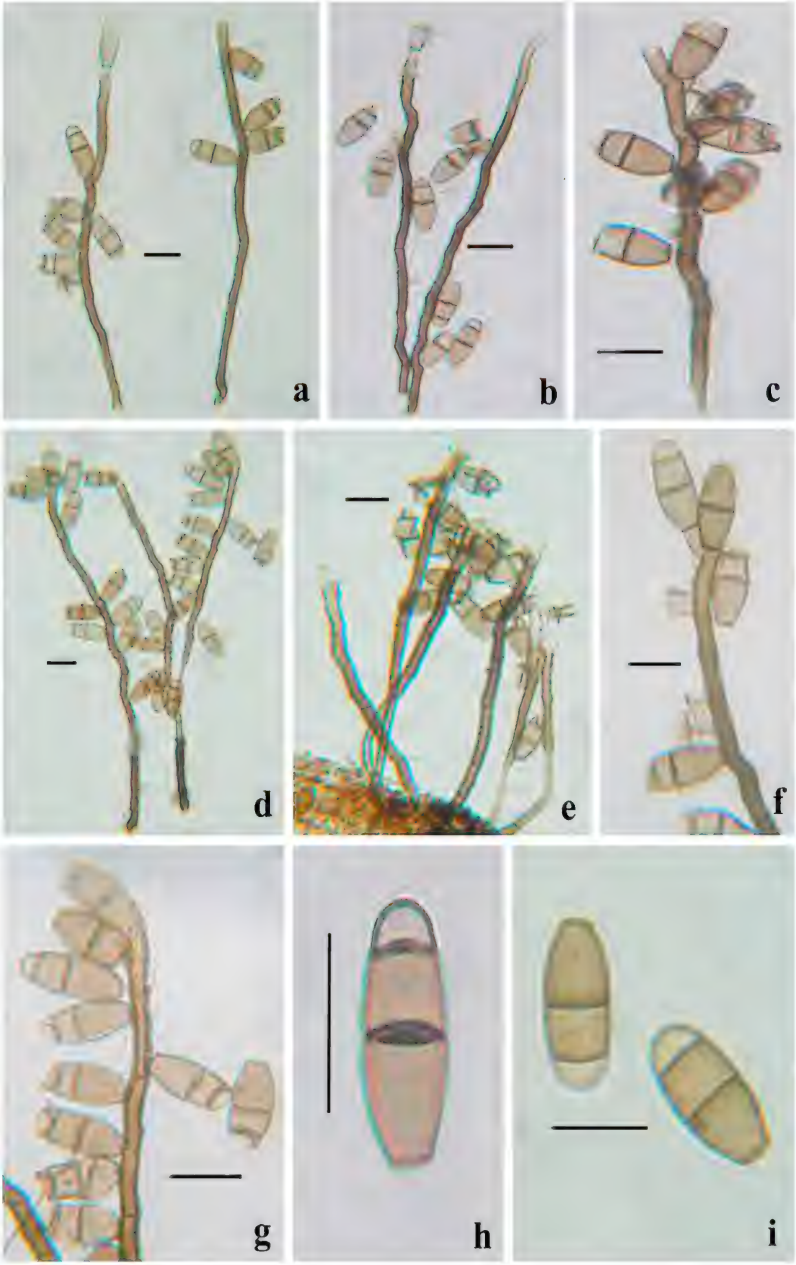

FIG. 2. *Sympodioplanus goaensis* (holotype HCIO 51503): a–g. Conidiophores, conidiogenous cells, and conidia; h–i. Conidia. Scale bars = 20 µm.

walled, dark brown, paler towards the apex, unbranched, 160–285 × 4–6.5 µm. Conidiogenous cells polyblastic, terminal as well as intercalary, sympodial, thick-walled, 8–10 × 2–3 µm, bearing flat scars. Conidia solitary, dry, light brown, thin-walled, smooth, naviculiform, rounded at the apex, truncate at the base; basal cells light brown, apical cell subhyaline, 1–2-septate, 22–36 × 8–12 µm.

Discussion

The genus *Sympodioplanus* is typified by *S. capensis* R.C. Sinclair & Boshoff, which was collected from dead, decorticated wood in South Africa (Sinclair et al. 1997). The genus is mainly characterised by conidiophores with sympodial proliferation with numerous conidiogenous loci and naviculiform, euseptate conidia. Yang et al. (2012) added a second species, *S. yunnanensis* G.Z. Yang & Z.F. Yu from China on submerged leaves of an unidentified dicotyledonous plant. These two articles comprise the total published knowledge of *Sympodioplanus*. *Sympodioplanus goaensis* differs from *S. capensis* and *S. yunnanensis* by length of the conidiophores and septation and size of the conidia (Table 1). All three species have polyblastic sympodial conidiogenous cells.

Table 1: Comparison of *Sympodioplanus* species

Species	Conidiophores	Conidia
S. capensis	Macronematous, moderately geniculate, <65 µm long	Naviculiform, 3(–5)-septate, 13–16 × 2.5–4 µm
S. goaensis	Macronematous, straight, 160–285 µm long	Naviculiform, 1–2-septate, 22–36 × 8–12 µm
S. yunnanensis	Macronematous, straight, 70–205 µm long	Spindle shaped, 4–7-septate, 38–56 × 6–10.8 µm

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